Application No.: 09/657,336 2 Docket No.: 500862001500

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1 (currently amended): A modified anti-viral peptide comprising[[:]] a peptide having been modified to contain a succinimidyl or maleimide containing group which is reactive with amino groups, hydroxyl groups, or thiol groups on blood components to form stable covalent bonds, said peptide comprising an amino acid sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:542, SEQ ID NO:543, and SEQ ID NO:544, and SEQ ID NO:545, and that exhibits said sequence exhibiting an anti-viral activity against human immunodeficiency virus (HIV).

a succinimidyl or maleimide containing group which is reactive with amino groups, hydroxyl groups, or thiol-groups on blood components to form stable covalent bonds.

Claim 2 (canceled).

Claim 3 (previously presented): The modified peptide of claim 1 wherein said succinimidyl or maleimide containing group is a maleimide containing group which is reactive with a thiol group on a blood protein.

Claim 4 (previously presented): The modified peptide of claim 1 wherein said peptide is DP 107 and comprises the amino acid sequence of SEQ ID NO:2.

Claim 5 (canceled).

Claim 6 (currently amended): The modified peptide of claim 1 wherein said peptide is selected from the group consisting of SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ

ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:542, SEQ ID NO:543, and SEQ ID NO:544, and SEQ ID NO:545.

Claims 7-18 (canceled).

Claim 19 (currently amended): A composition for use in the prevention and/or treatment of acquired immune deficiency syndrome (AIDS) comprising, in a physiologically acceptable medium, a modified peptide including a peptide having been modified to contain a succinimidyl or maleimide containing group which is reactive with amino groups, hydroxyl groups, or thiol groups on blood components to form stable covalent bonds, wherein said peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:542, SEQ ID NO:543, and SEQ ID NO:544, and SEQ ID NO:545, and that exhibits said sequence exhibiting an anti-viral activity against human immunodeficiency virus (HIV).modified with a succinimidyl or maleimide containing group which is reactive with amino groups, hydroxyl groups, or thiol groups on blood components to form stable covalent bonds.

Claim 20 (previously presented): The composition of claim 19 wherein said succinimidyl or maleimide containing group is a maleimide containing group which is reactive with a thiol group on a blood protein.

Claim 21 (previously presented): The composition of claim 20 wherein said peptide is DP 107 comprising the amino acid sequence of SEQ ID NO:2.

Claims 22-30 (canceled).

Claim 31 (currently amended): The composition of claim 19 wherein said peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:542, SEQ ID NO:543, and SEQ ID NO:544, and SEQ ID NO:545.

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Claim 32 (withdrawn): A conjugated peptide comprising the modified antiviral peptide of claim 1 covalently bonded to a blood component.

Claim 33 (withdrawn): The conjugated peptide of claim 32 wherein said succinimidyl or maleimide containing group is a maleimide containing group which is reactive with a thiol group on a blood protein.

Claim 34 (withdrawn): The conjugated peptide of claim 32, wherein said modified anti-viral peptide comprises the amino acid sequence of SEQ ID NO:2.

Claim 35 (withdrawn -- currently amended): The conjugated peptide of claim 32, wherein said modified anti-viral peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:542, SEQ ID NO:543, and SEQ ID NO:544, and SEQ ID NO: 545.

Claim 36 (currently amended): A composition comprising the modified anti-viral peptide of claim 1 in a physiologically acceptable medium.

Claim 37 (previously presented): The composition of claim 36 wherein said succinimidyl or maleimide containing group is a maleimide containing group which is reactive with a thiol group on a blood protein.

Claim 38 (previously presented): The composition of claim 36 wherein said modified anti-viral peptide comprises the amino acid sequence of SEQ ID NO:2.

Claim 39 (currently amended): The composition of claim 36 wherein said modified anti-viral peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:542, SEQ ID NO:543, and SEQ ID NO:544, and SEQ ID NO:545.

Claim 40 (withdrawn -- currently amended): A composition comprising the conjugated peptide of claim [[31]] 32 in a physiologically acceptable medium.

Claim 41 (withdrawn): The composition of claim 40 wherein said succinimidyl or maleimide containing group is a maleimide containing group which is reactive with a thiol group on a blood protein.

Claim 42 (withdrawn): The composition of claim 40 wherein said modified anti-viral peptide comprises the amino acid sequence of SEQ ID NO:2.

Claim 43 (withdrawn -- currently amended): The composition of claim 40 wherein said modified anti-viral peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:542, SEQ ID NO:543, and SEQ ID NO:544, and SEQ ID NO:545.

Claim 44 (withdrawn): A method of treating human immunodeficiency virus (HIV) infection in a patient, comprising administering to said patient an effective amount of the modified anti-viral peptide of claim 1.

Claim 45 (withdrawn): The method of claim 44 wherein said succinimidyl or maleimide containing group is a maleimide containing group which is reactive with a thiol group on a blood protein.

Claim 46 (withdrawn): The method of claim 44 wherein said modified antiviral peptide comprises the amino acid sequence of SEQ ID NO:2.

Claim 47 (withdrawn -- currently amended): The method of claim 44 wherein said modified anti-viral peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:542, SEQ ID NO:543, and SEQ ID NO:544, and SEQ ID NO:545.

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Claim 48 (withdrawn): A method of treating human immunodeficiency virus (HIV) infection in a patient, comprising:

- reacting the modified anti-viral peptide of claim 1 for a time and under conditions effective to form a covalent bond between said modified anti-viral peptide and said blood component, thereby forming a conjugate; and
- administering said conjugate to said patient.

Claim 49 (withdrawn): The method of claim 48 wherein said succinimidyl or maleimide containing group is a maleimide containing group which is reactive with a thiol group on a blood protein.

Claim 50 (withdrawn): The method of claim 48 wherein said modified antiviral peptide comprises the amino acid sequence of SEQ ID NO:2.

Claim 51 (withdrawn -- currently amended): The method of claim 48 wherein said modified anti-viral peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:180, SEQ ID NO:181. SEQ ID NO:542, SEQ ID NO:543, and SEQ ID NO:544, and SEQ ID NO:545.

Claim 52 (new): A method of treating human immunodeficiency virus (HIV) infection in a patient, comprising administering to said patient an effective amount of the conjugated peptide of claim 32.

Claim 53 (new): The method of claim 52 wherein said succinimidyl or maleimide containing group is a maleimido containing group which is reactive with a thiol group on a blood protein.

Claim 54 (new): The method of claim 52 wherein said modified anti-viral peptide comprises the amino acid sequence of SEQ ID NO:2.

Claim 55 (new): The method of claim 52 wherein said modified anti-viral peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:542, SEQ ID NO:543, SEQ ID NO:544, and SEQ ID NO:545.